

In the claims:

13. (previously presented).A membrane for use in conjunction with a semiconductor carrier which comprises:

- (a) an electrically insulating substrate for application to a semiconductor carrier;
- (b) an interconnect pattern on said substrate; and
- (c) a stud coupled to said interconnect pattern on said substrate, said stud comprising a gold ball and a compliant material coating over a portion of said gold ball.

14. (previously presented) The membrane of claim 13 wherein said gold ball is the ball of a ball bond on said substrate.

15. (previously presented) The membrane of claim 13 wherein said coating is a compliant epoxy resin.

16. (previously presented) The membrane of claim 14 wherein said coating is a compliant epoxy resin.

17. (previously presented) The membrane of claim 15 wherein said compliant material is filled with a material having sufficient hardness to be capable of penetrating the oxide film on the contact pads of semiconductor devices.

18. (previously presented) The membrane of claim 15 wherein said compliant material is filled with a material having sufficient hardness to be capable of penetrating the oxide film on the contact pads of semiconductor devices.

19. (previously presented) The membrane of claim 17 wherein said material is silver or silver-based flakes.
20. (previously presented) The membrane of claim 18 where the material is silver or silver-based flakes.